

PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

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MEMORANDUM

TO: Plymouth County Retirement Board

FROM: John W. Parsons, Esq., Executive Director

RE: Approval of Funding Schedule

DATE: December 5, 2019

This Commission is hereby furnishing you with approval of the revised funding schedule you recently adopted (copy enclosed). The schedule assumes payments are made in equal installments on July 1 and January 1 of each fiscal year. The schedule is effective in FY20 (since the amount under the prior schedule was maintained in FY20) and is acceptable under Chapter 32.

We are approving the schedule because the schedule aggressively funds the plan to complete the amortization of the unfunded liability by FY29. However, we continue to have concerns about the plan assumptions. The Board decreased the investment return assumption from 8.0% to 7.875% in this valuation. However, this assumption is the highest of any Chapter 32 plan. For comparison, 35 systems currently use an assumption of 7.25% or lower. We expect there will be more than 40 such systems when all the 2019 valuations are completed. There are 54 systems using an assumption of 7.30% - 7.50%. We have generally recommended an assumption of 7.0% - 7.25% for our 2019 actuarial valuations. The 7.875% assumption is outside our reasonable range for the investment return assumption.

Our understanding is that your actuary recommended updating the mortality assumption. The Board instead maintained the assumption adopted in the 2017 valuation. This mortality assumption is significantly less conservative than the current standard PERAC assumption. Our assumption was updated this year based on a review of local system retiree mortality. Based on our analysis of local systems as well as the State Retirement System, we could not justify the assumption used in your valuation. We also note there is a loss shown on page 3 of the January 1, 2019 actuarial valuation of \$41.9 million due to retiree mortality and data adjustments. Plan assumptions should not be selected based on how the actuarial liability is impacted.



December 5, 2019

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Finally, we note that the amortization basis used in the schedule reflects a 7.0% annually increasing amortization of the unfunded liability. Such a schedule is not allowed under Chapter 32. However, the result is a schedule that has appropriations that increase about 6.5% in most years and we find allowable. The amortization basis should be considered at the time of the next valuation.

If you have any questions, please contact PERAC's Actuary, John Boorack, at (617) 666-4446, extension 935.

JWP/jfb

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Appropriation Forecast

Fiscal Year	Employee	Employer	Amortization	Employer	Employer		
Ending	Contribution	Normal Cost	Payments	Total Cost	Total Cost	Unfunded	Funded
		with Interest	with Interest	with Interest	% of Payroll	Liability	Ratio %**
2020	\$24,890,994	\$6,341,794	\$68,825,901	\$75,167,695	26.7	\$635,819,434	61.9
2021	\$26,035,691	\$6,356,006	\$74,796,208	\$81,152,214	27.8	\$615,807,995	63.7
2022	\$27,231,237	\$6,362,367	\$80,029,257	\$86,391,624	28.5	\$588,052,979	66.1
2023	\$28,479,837	\$6,360,266	\$85,628,619	\$91,988,885	29.2	\$552,777,501	68.9
2024	\$29,783,788	\$6,349,061	\$91,619,937	\$97,968,998	30.0	\$509,015,890	72.0
2025	\$31,145,485	\$6,328,071	\$98,030,647	\$104,358,718	30.8	\$455,700,292	75.4
2026	\$32,567,426	\$6,296,578	\$104,890,106	\$111,186,684	31.7	\$391,650,786	79.3
2027	\$34,052,215	\$6,253,825	\$112,229,728	\$118,483,553	32.5	\$315,564,605	83.7
2028	\$35,602,564	\$6,199,011	\$120,083,123	\$126,282,134	33.4	\$226,004,368	88.5
2029	\$37,221,304	\$6,131,291	\$128,447,888	\$134,579,179	34.3	\$121,385,234	94.0
2030	\$38,911,383	\$6,049,775	\$0	\$6,049,775	1.5	(\$0)	100.0
2031	\$40,675,876	\$5,953,523	\$0	\$5,953,523	1.4	(\$0)	100.0
2032	\$42,517,986	\$5,841,544	\$0	\$5,841,544	1.3	(\$0)	100.0
2033	\$44,441,055	\$5,712,795	\$0	\$5,712,795	1.3	(\$0)	100.0
2034	\$46,448,562	\$5,566,175	\$0	\$5,566,175	1.2	(\$0)	100.0
2035	\$48,544,138	\$5,400,526	\$0	\$5,400,526	1.1	(\$0)	100.0
2036	\$50,731,563	\$5,214,624	\$0	\$5,214,624	1.0	(\$0)	100.0
2037	\$53,014,780	\$5,007,186	\$0	\$5,007,186	1.0	(\$0)	100.0
2038	\$55,397,897	\$4,776,857	\$0	\$4,776,857	0.9	(\$0)	100.0
2039	\$57,885,196	\$4,522,212	\$0	\$4,522,212	0.8	(\$0)	100.0
2040	\$60,481,139	\$4,241,751	\$0	\$4,241,751	0.7	(\$0)	100.0
2041	\$63,190,376	\$3,933,896	\$0	\$3,933,896	0.6	(\$0)	100.0
2042	\$66,017,755	\$3,596,987	\$0	\$3,596,987	0.6	(\$0)	100.0
2043	\$68,968,325	\$3,229,278	\$0	\$3,229,278	0.5	(\$0)	100.0
2044	\$71,554,637	\$3,350,376	\$0	\$3,350,376	0.5	(\$0)	100.0
2045	\$74,237,936	\$3,476,015	\$0	\$3,476,015	0.5	(\$0)	100.0
2046	\$77,021,859	\$3,606,366	\$0	\$3,606,366	0.5	(\$0)	100.0
2047	\$79,910,179	\$3,741,604	\$0	\$3,741,604	0.5	(\$0)	100.0
2048	\$82,906,810	\$3,881,915	\$0	\$3,881,915	0.5	(\$0)	100.0
2049	\$86,015,816	\$4,027,486	\$0	\$4,027,486	0.5	(\$0)	100.0
2050	\$89,241,409	\$4,178,517	\$0	\$4,178,517	0.5	(\$0)	100.0
2051	\$92,587,962	\$4,335,212	\$0	\$4,335,212	0.5	(\$0)	100.0